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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
087838,452	04/07/97	FARNWORTH W	91-62.17

MM11/0811

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EXAMINER	
KARLSEN, E	

ART UNIT	PAPER NUMBER
2858	

DATE MAILED: 08/11/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
08/838452	FARNWORTH ET AL
Examiner	**Group Art Unit**
ERNEST F. KARLSEN	2858

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

P riod for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☒ Responsive to communication(s) filed on 4-7-97 and 4-7-97.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 78-83, 87-96 is/are pending in the application.

Of the above claim(s) 83, 89, 94, 95 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 78-82, 87, 88, 90-93, 96 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of References Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Acti n Summary

1. Claims 83, 89, 94, 95 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected species. Election was made **without** traverse in Paper No. 22.

2. Claims 78-82, 87, 88, 90-93 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elder in first set in view of Nakano in a second set and Blonder et al., Bindra et al., or Anschel et al. in a third set. The first set shows a test socket for a die wherein test contacts are mounted on a film. The second set shows test contacts on a substrate wherein both are made of silicon. The contacts have a penetration limiting planar surface. The third set shows penetration limiting contacts with plural points. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have adapted the substrate and contact structure of the second set to the apparatus of the first set because such would enable testing without differential thermal expansion and to adapt the plural contact features of the third set to the resulting apparatus because such would enable more reliable contact. The height of the raised portion would in accord with the teaching of the second set be of an appropriate amount. That which is being tested is considered a matter of choice. Recessed metal bond pads are old and well known in the art and would be included in that normally tested with an apparatus of the above combination.

3. Claims 78-82, 87, 88, 90-93 and 96 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano in first set in view of Blonder et al., Bindra et al. or Anschel et al. in a second set. The references were discussed above. It is additionally noted that Nakano can be

used to test wafers or chips as stated on page 2 at lines 3 and 4. One skilled in the art would realize that the test probe and the chip would have to be held together somehow. For instance, the chip might be placed on a vacuum chuck and the test probe held above and the chuck raised until proper contact is made. The chip might be held in a plate with a cutout and the test probe clamped to the plate wherein the test probe and plate are biased toward each other. The bias could be applied between the ends of a U-shaped arm or a weight could be placed on top of the assembly. The possibilities are many. It would have been obvious to one ordinary skill in the art at the time invention was made to have adapted the plural tipped probes of the second set to the apparatus of the first set because one skilled in the art would realize that so doing would provide more reliable contact.

4. Applicant arguments with regard to the previous rejections and with regard to the claims as now amended have been considered but are found non-persuasive. With regard to the "selected contact force" argument the Examiner contends that one skilled in the art would apply a force sufficient to make contact but not so great as to destroy the device under test. The Nakano reference is from another age in this fast changing field of technology, but once again, one skilled would make adjustments for the decreasing dimensions of components on and IC chip. One who doesn't know enough to do so could hardly be considered skilled. Applicants state that Anschel et al is an improper reference because of a priority date of June 4, 1991. The Application that establishes that date dos not include the feature for which Anschel is used.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ormum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 78-82, 87, 88, 90-93 and 96 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-43 of U.S. Patent No. 5,302,891 in view of Nakano, Blonder et al, Bindra et al and Anschel et al. U.S. Patent No. 5,302,891 to Wood et al shows that claimed except for the penetrating feature. Nakano, Blonder et al, Bindra et al and Anschel et al show the penetrating features. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have modified the apparatus of Wood et al to have the penetrating features of Nakano, Blonder et al, Bindra et al or Anschel et al because one skilled in the art would realize that such would enable better contact.

Any inquiry concerning this communication should be directed to Examiner Karlsen at telephone number (703) 308-0956.

Ernest F. Karlsen

Karlsen/ss

May 11, 1998

Ernest F. Karlsen
Primary Examiner
A. U. 2858